

The Genuine. The Original.



SECTION 08330

OVERHEAD COILING DOORS
RAPIDSLAT® 611 SERIES ADVANCED PERFORMANCE ROLLING SERVICE DOORS

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Advanced performance rolling service doors.

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrications: Support framing and framed opening.
- B. Section 06200 - Finish Carpentry: Wood jamb and head trim.
- C. Section 08333 - Security Grilles.
- D. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.
- E. Section 09900 - Painting: Field applied finish.
- F. Section 16130 - Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control station.
- G. Section 16150 - Wiring Connections: Power to disconnect.

1.3 REFERENCES

- A. ANSI/DASMA 108 - American National Standards Institute Standard Method For Testing Sectional Garage Doors And Rolling Doors: Determination Of Structural Performance Under Uniform Static Air Pressure Difference.
- B. NFRC 102 - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
- C. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.
- D. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

- E. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- F. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- G. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- H. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- I. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
- J. NEMA MG 1 - Motors and Generators.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Advanced Performance Rolling Service doors:
 - 1. Windload: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) in conformance with DASMA 108-2012 and as required by local codes without damage to door or assembly components. Does not apply to doors with optional wearstrip guides.
- B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Details of construction and fabrication.
 - 4. Installation instructions.
- C. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 COORDINATION

- A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

1.10 WARRANTY

- A. Warranty: Manufacturer's limited door warranty for 5 years on door system materials and workmanship.
- B. PowderGuard Finish
 - 1. PowderGuard Premium Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Premium Finish warranty for 2 years.
 - 2. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Premium applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.
 - 3. PowderGuard Textured: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Textured Finish warranty for 3 years.
 - 4. PowderGuard Zinc Base Coat applied to guides, bottom bar, headplates plus PowderGuard Textured applied to curtain and top coat for guides, bottom bar, headplates: Manufacturer's limited Zinc Finish warranty for 4 years.

5. PowderGuard Max: Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Max Finish warranty for 5 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overheaddoor.com. E-mail: info@overheaddoor.com.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 ADVANCED PERFORMANCE ROLLING SERVICE DOORS

- A. RapidSlat Model 611 Service Doors by Overhead Door Corporation.
 1. Curtain: Interlocking roll-formed metal slats as specified with endlocks attached to each end of alternate slats to prevent lateral movement.
 - a. Curved Profile type C-187 for doors up to 15 feet 4 inches wide shall be fabricated:
 - 1) 22 gauge powder coated steel.
 - 2) 20 gauge powder coated steel.
 - 3) 18 gauge powder coated steel.
 - 4) 22 gauge stainless steel.
 - 5) 20 gauge stainless steel.
 - 6) .040 inch (1 mm) aluminum.
 - b. Curved Profile type C-275 for doors up to 20 feet wide shall be fabricated of:
 - 1) 22 gauge powder coated steel.
 - 2) 20 gauge powder coated steel.
 - 3) 18 gauge powder coated steel.
 - 4) 22 gauge stainless steel.
 - 5) 20 gauge stainless steel.
 - 6) .050 inch (1.29 mm) aluminum.
 - c. Flat Profile type F-265 for doors up to 20 feet wide fabricated of:
 - 1) 22 gauge powder coated steel.
 - 2) 20 gauge powder coated steel.
 - 3) 18 gauge powder coated steel.
 - 4) 22 gauge stainless steel.
 - 5) 20 gauge stainless steel.
 - 6) .050 inch (1.29 mm) aluminum.
 - d. Fenestrated Service Doors: Provide slats with 3 inch by 5/8 inch uniformly spaced openings:
 - e. Ventilated Service Doors: Provide slats with 1/16 inch (16 mm) diameter perforations 3/32 inch (2.4 mm) on center staggered rows.
 - f. Curtain Finish:
 - 1) PowderGuard Max powder coat.
 - (a) Gray.
 - (b) Tan.
 - (c) White.
 - (d) Color as selected by Architect.

2. Bottom Bar: Two metal angles, minimum thickness 3/16 inch, bolted back to back to reinforce curtain in the guides.
 - a. Material:
 - 1) Steel.
 - 2) Extruded aluminum.
 - 3) Stainless steel with brushed finish.
3. Guides: Three Structural steel angles provided with high usage guide wear strip to minimize wear and reduce sound.
 - a. Material:
 - 1) Steel.
 - 2) High usage guide wear strips.
4. Brackets:
 - a. Hot rolled prime painted steel to support counterbalance, curtain and hood.
 - b. Galvanized steel to support counterbalance, curtain and hood.
5. Finish; Bottom Bar, Guides, Headplate and Brackets:
 - a. Finish: Black powdercoat finish.
 - b. Finish: PowderGuard Premium powder coat color as selected by the Architect.
 - c. Finish: PowderGuard Zinc base coat, gray with PowderGuard Premium powder coat color as selected by the Architect.
 - d. Finish: PowderGuard Textured powder color as selected by the Architect.
 - e. Finish: PowderGuard Zinc base coat, gray with PowderGuard Textured powder color as selected by the Architect.
 - f. Finish: PowderGuard Max powder color as selected by the Architect.
6. Motor: Direct drive, integrated gear motor/brake assembly sized for openings. Provide with a manual hand chain for operation during power outages. Operator and drive assembly is factory pre-assembled and provided with all wiring harnesses needed direct from the factory.
 - a. Opening Speed: Up to 24 inches per second.
 - b. Closing Speed: 12 inches per second.
 - c. Electrical Characteristics: 220V AC, single phase per motor/drive.
 - d. Electrical Characteristics: 208/230V AC, 3 phase per motor/drive.
 - e. Electrical Characteristics: 460V AC, 3 phase per motor/drive.
 - f. Electrical Characteristics: 575V AC, 3 phase per motor/drive.
 - g. Left hand mount.
 - h. Right hand mount.
7. Control Panel: Provide electronic Variable Frequency drive controller with microprocessor self-diagnostics. LCD readout indicates door action, alarm conditions, and fault conditions. Timer to close programming options and non-resettable cycle counter are included. Enclosure is NEMA 4X rated. Control system is UL508A certified. Junction box is IP67 rated.
8. Door Roll: Directly driven, springless roll shall be steel tube with integral shafts, keyed on the Drive End and supported by self-aligning greaseable sealed bearings. Door shall not require any counterbalance device.
9. Hood: Protecting drive motor, barrel, chain, and sprocket from dirt and debris and extending between the support brackets. Fabricated of:
 - a. Material:
 - 1) Steel.
 - 2) Aluminum.
 - 3) Stainless steel with brushed finish.
 - b. Steel/Aluminum Finish:
 - 1) Polyester paint in black color (steel only).
 - 2) PowderGuard Premium powder coat, color as selected by Architect.

- 3) PowderGuard Textured powder coat, color as selected by Architect.
 - 4) PowderGuard Max powder coat, color as selected by Architect.
 - c. Provide with sloped top for exterior mounting.
- 10. Safety Devices: Provide door with following safety devices:
 - a. Photoelectric sensors that cast an invisible beam across the door opening and reverses the downward motion of the door when an object enters the path of the beam.
 - b. Wireless, monitored safety edge reverses downward motion upon impact.
 - c. Built-in (to motor assembly) brake mechanism eliminates uncontrolled curtain travel independent of other safeties.
- 11. Actuators:
 - a. One Open/Close/Stop push button station incorporated into Control Panel.
 - b. Loop detectors.
 - c. Radio control.
 - d. Interior Push buttons.
 - e. Exterior Push buttons.
 - f. Interior Key switch.
 - g. Exterior Key switch.
 - h. Motion detectors.
 - i. Warning light.
 - j. Horns and/or strobes.
 - k. Second set of photoelectric sensors.
- 12. Windload Design:
 - a. Standard windload shall be 20 PSF.
 - b. Miami-Dade County NOA ____.
 - c. FBC certification FL# ____.
 - d. TDI approval # ____.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- E. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G. Install perimeter trim and closures.
- H. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

3.4 ADJUSTING

- A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Adjust hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

- A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION